Montana Fish, Wildlife and Parks

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Montana
CWD Management Action Plan

Montana Fish, Wildlife and Parks CWD Action Team

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Photo: Mike Hopper, Kansas Department of Wildlife, Parks and Tourism

A CWD-afflicted white-tailed deer. This animal will die soon.

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Introduction

This Action Plan spells out the details of what has been decided in the 2014 Decision Notice (Montana Fish, Wildlife and Parks 2014) regarding Montana Fish, Wildlife and Parks' (FWP) response actions to any first or new detection of CWD in the state. It draws on existing management plans (Montana Fish, Wildlife and Parks 2005, 2013) but adds significant logistical details. The intent of previous plans and this update are: 1) prevent the introduction of CWD into Montana, 2) limit the spread of CWD when it is found in Montana, 3) maintain or reduce the prevalence of CWD in specific locations when it is found, and 4) improve communication and educational outreach on CWD with the public, other agencies, and within FWP. Actions relating to the *prevention* of CWD arriving in Montana have been implemented since 2006 and will continue indefinitely depending on the status of CWD in Montana and any advances concerning the transmission and potential treatment of CWD. Actions related to the *initial and long-term management* of CWD have been revised, and will be initiated in a localized area around any first or new detection of CWD in free-ranging Montana deer, elk, or moose. Plans for *communication and outreach* aim to support FWP's goals of prevention and CWD management, and include ongoing efforts and a detailed communication plan to be used following a first or new detection of CWD in Montana's wild herds.

The CWD Management program will be adaptive. Changes to the program will be made based on knowledge gained from both Montana's CWD management program and programs in other states and provinces as they are evaluated and the most effective approaches to CWD prevention and control are identified. An internal FWP "CWD Action Team" will modify this plan through periodic review. In addition, a "CWD Citizen's Advisory Panel" consisting of members of the public from across the state, including wildlife and livestock perspectives, scientific and recreation interests, commerce and tourism, and local and state government representation, was formed in spring 2017. This panel will provide input on FWP's updated plan and will assist with communication and educational outreach efforts to the larger public.

Authority

Several sections of Montana Code Annotated give FWP the responsibility for management of all wild, native cervids. The Department of Livestock has authority for disease management and for the management of "alternative livestock" which includes game farms. Although establishment of new game farms was banned via a 2001 citizen initiative, 39 game farms still exist under the grandfather clause in the law.

Background

<u>Biology, distribution, and population impacts</u>

Chronic Wasting Disease (CWD) is a fatal neurologic disease of elk, deer, moose and caribou for which there is no known cure. It belongs to a group of diseases called transmissible spongiform encephalopathies (TSEs), a group which also includes mad cow disease or bovine spongiform encephalopathy in cattle, scrapie in sheep and Creutzfeldt-Jakob's disease in humans. The

causative agent in TSEs is an abnormally folded prion protein (referred to as a "prion") that causes normal cellular prion proteins found in the body to mis-fold into disease causing forms (Prusiner 1998). Mis-folded prions accumulate in infected animals and cause cell death that eventually leads to fatal nerve and brain damage. CWD prions have been detected throughout the body of infected individuals, including the brain and central nervous system (Williams 2005), tonsils and lymph nodes (Sigurdson et al., 1999; O'Rourke et al., 2003), saliva and blood (Mathiason et al., 2006; Haley et al., 2011), the intestinal tract, urinary bladder, urine and feces (Tamguney et al., 2009), muscle (Angers et al., 2006), fat (Race et al., 2009), and antler velvet (Angers et al., 2009). CWD is most easily and commonly transmitted by animal-to-animal contact but can also be transmitted by contact with a prion-contaminated environment such as grass and soil. Infected animals shed prions in saliva, feces, and urine for most of the course of their infection, and via bodily tissues and fluids upon death, and these prions may remain infectious in the environment for at least 2 years (Miller et al., 2004). CWD has an average incubation period from infection to clinical signs of approximately 16 months, and the clinical phase may last an additional 4-9 months, culminating in death (Williams & Miller, 2002; Williams et al., 2002; Tamguney et al., 2009). There are no documented recoveries from infection and the disease is believed to be uniformly fatal.

AT THE END: An elk in the final stages of wasting disease (Beth Williams photo, University of Wyoming)

To date, CWD has been detected in captive or free-ranging wildlife populations in 24 US states (Colorado, Wyoming, Montana, Utah, New Mexico, Texas, Kansas, Nebraska, Oklahoma, North Dakota, South Dakota, Minnesota, Iowa, Missouri, Arkansas, Wisconsin, Illinois, Michigan, Ohio, Pennsylvania, West Virginia, Virginia, Maryland, and New York),the Canadian provinces of Alberta and Saskatchewan, and in Norway, and South Korea, and continues to expand its range annually. Many of these US states and Canadian provinces have documented the gradual spread of CWD despite attempts at managing it. One common observation is the patchy distribution of infections on the landscape (Conner and Miller, 2004; Miller & Conner, 2005; Farnsworth et al., 2006; Joly et al., 2006; Osnas et al., 2009; Heisey et al., 2010). Social, matrilineal, or breeding aggregations, habitat refugia, or "hot spots" of environmental contamination may be important amplifiers of transmission that lead to patchy prevalence over the landscape.

Determining the population effects of a disease with such a long incubation period is difficult. Several simulation modeling studies have predicted moderate to dramatic cervid population declines, including local extinction, over long timescales (>20 years) (Gross and Miller 2001, Wasserberg et al., 2009, Almberg et al., 2011). Radio-collaring studies have documented significantly lower survival for deer and elk infected with CWD, and some have measured declines in annual population growth rates (Miller et al., 2008, Monello et al., 2014, Geremia et al., 2015, Edmunds et al., 2016, DeVivo, 2015, Samuel & Storm, 2016).

Documented CWD-related herd-level declines in mule deer include a 21% annual decline in Wyoming (at 21-27% CWD prevalence; DeVivo 2015, DeVivo et al., 2017) and a 45% decline in Colorado (from 1987-2007 given prevalences of up to 41% in males and 20% in females; Miller et al., 2008). Among white-tailed deer, Edmunds et al. (2016) found a 10% annual decline (given 33% prevalence). However, uncertainty remains over the size and extent of any future CWD-associated declines. Because the distribution and intensity of CWD infections appears to be highly variable (Conner and Miller, 2004; Miller and Conner, 2005; Farnsworth et al., 2006; Joly et al., 2006; Osnas et al., 2009; Heisey et al., 2010), population responses may be expected to be similarly variable across the landscape. However, as noted above, if left unchecked CWD could result in large-scale population declines.

Existing management tools and evidence for their efficacy

Once CWD is present in a wild population, it is extremely difficult, if not impossible, to eliminate. New York and perhaps Minnesota (results are unclear from Minnesota at this writing) may be the only two states to have eliminated a CWD outbreak after its detection; both responded aggressively to what appears to have been very early and small outbreaks (Miller and Fischer 2016). In most places where it has been found, however, CWD is discovered after it has been established for some time. The approximately 16-month incubation period, during much of which an animal is infectious and shedding potentially long-lived prions into the environment, makes it difficult to detect an emerging epidemic before it is well established.

There are currently no effective treatments or vaccines for CWD. Prevention is critical to the control of CWD over large landscapes. Preventative tools include restricting the transport of carcasses from CWD-infected areas or states, banning the transport or translocation of wild cervids and requiring the responsible disposal (e.g. incineration or disposal in certified landfills) of carcasses from infected regions. Many states also restrict the baiting and feeding of wild cervids to help limit artificial aggregations that might facilitate more rapid disease transmission.

Despite the low likelihood of eliminating CWD from a wild population, there are several promising tools for slowing or controlling its spread and prevalence. To date, many states have attempted a combination of population density reduction, disease “hot-spot” culling and reducing large aggregations of cervids. Population density is often thought to be positively related to contact rate and hence transmission rates. However, due to cervid social behavior and the potential for transmission of CWD via the environment, this may not always be the case (Storm et al., 2013; Potapov et al., 2013). Thus, population density reductions alone may have only modest impacts on maintaining or reducing CWD prevalence. “Hot-spot” culling, the strategic removal of animals from a local area, uses public hunting and/or agency staff to dramatically reduce cervids in a restricted portion of a population or geographic region centered around known CWD infections. The goal is to remove a cluster of infected animals and thereby reduce prevalence in the larger population. Another approach to reduce contact rates and transmission is to reduce large aggregations of cervids (i.e. large compact herds)

either by eliminating food attractants (e.g. fencing haystacks), changing habitat structure, or through hunting pressure.

Research from Wisconsin, Illinois, and Colorado suggests that combinations of these management tools may help maintain or reduce CWD prevalence. Wisconsin attempted aggressive population reductions from 2003 to 2007, during which CWD prevalence remained relatively stable (Heisey et al., 2010). However, when agency-led culling was stopped because of public opposition (Holsman et al., 2010), prevalence began to increase (Heisey et al., 2010; Manjerovic et al., 2014). In contrast, neighboring Illinois continued population reduction and hot-spot culling and CWD prevalence remained stable (Manjerovic et al., 2014; Mateus-Pinilla et al., 2013). Similarly, work by Geremia et al. (2015) in Colorado suggests that population density reductions and hot-spot culling may have contributed to declines in CWD prevalence in some herds. However, additional replication and evaluation of these experimental management techniques is needed, since not all jurisdictions have detected declining prevalence in response to management (Conner et al., 2007).

Computer simulation models have been used to explore options for controlling CWD. Most recently, several studies have predicted that increasing male harvest and reducing male to female sex ratios in cervids may be one of the most effective tools for reducing CWD prevalence (Jennelle et al., 2014, Potapov et al., 2016). While anecdotal evidence from several jurisdictions may provide support for this hypothesis, it has yet to be tested experimentally. Furthermore, natural predation, particularly by selective predators, has been predicted to help stabilize or reduce CWD prevalence (Miller et al., 2008, Wild et al., 2011).

History of CWD surveillance and planning in Montana

From 1996 to 2016, Montana sampled and tested over 17,000 wild deer, elk, and moose for CWD with no positive detections (for a detailed history of CWD surveillance in Montana, see Anderson et al., 2012). The intensity and distribution of surveillance has varied over time with the most intensive efforts from 2002 to 2011 coinciding with the availability of federal funding. Following a detection of CWD in a captive game farm outside of Phillipsburg in 1999, FWP began focusing surveillance efforts on “high-risk” areas of known proximity to CWD detections. Russell et al. (2015) conducted a more formal risk assessment which accounted for both the proximity to known CWD detections in neighboring states as well as local mule deer densities, and identified several high-priority surveillance areas on the northern and southern borders of the state (Figure 1). Furthermore, several research projects have examined mule deer movements near our borders with Wyoming (Carnes, 2009) and Alberta and Saskatchewan (Montana Fish, Wildlife and Parks, 2017) to better inform our risk assessments and potential management responses.

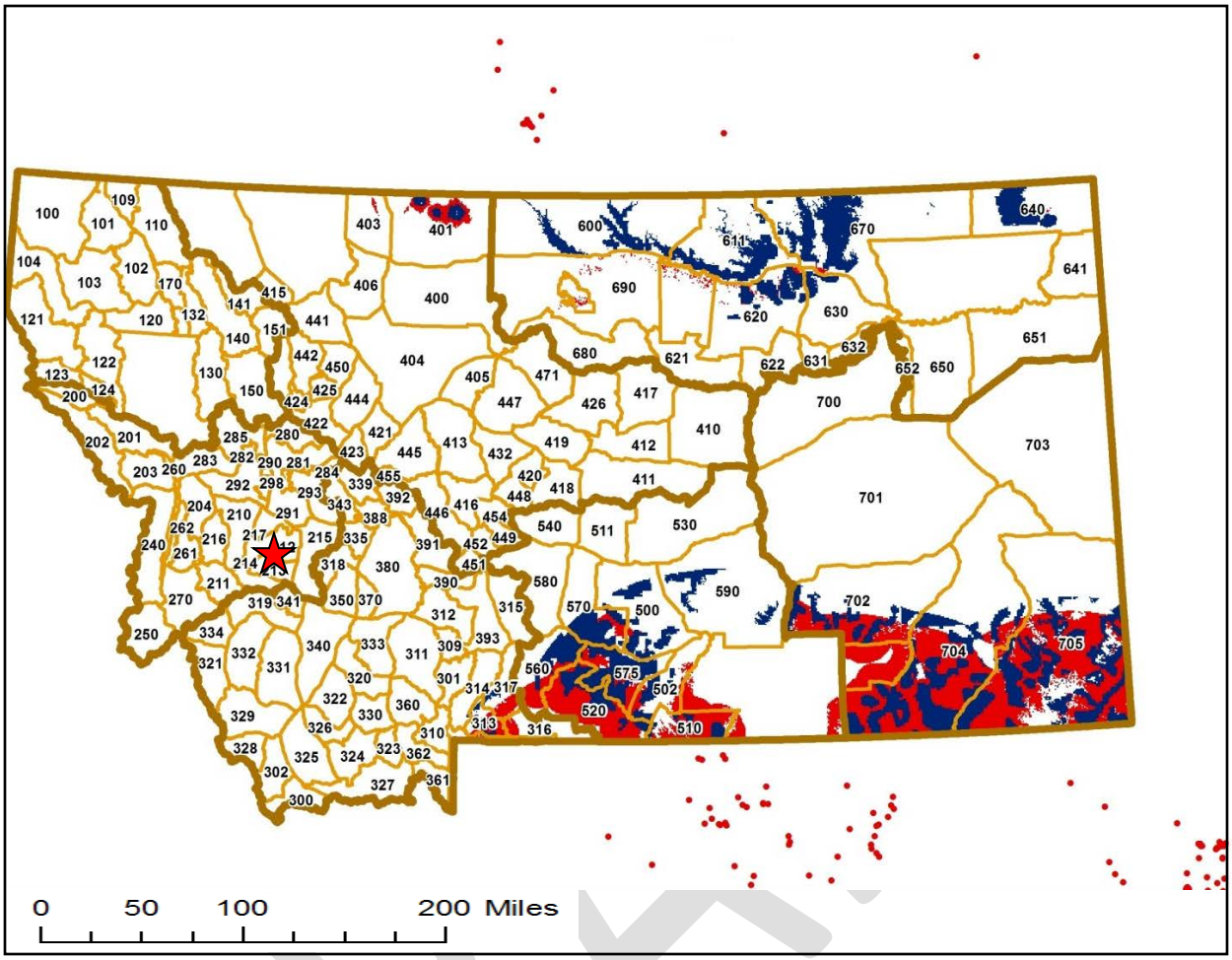


Figure 1. Winter (blue) and summer (red) chronic wasting disease (CWD) priority surveillance areas for mule deer in Montana. Areas were identified based on proximity to known CWD cases in neighboring states/provinces and high relative mule deer densities in adjacent areas in Montana. The red star marks the approximate location of the game farm where CWD was found in 1999. Mule deer hunt districts are displayed. Red dots are known CWD cases in wild cervids from neighboring states/provinces. Map updated 2016 based upon Russell et al. 2015.

Montana has also gone through several iterations of CWD management planning. Montana Fish, Wildlife and Parks published its first CWD management plan and decision notice in 2005-2006 (Montana Fish, Wildlife, and Parks, 2005, 2006). In 2011, the agency held an internal CWD Structured Decision Making Workshop which helped re-define the problem, objectives, and management alternatives for CWD. The 2005 Management Plan and 2006 Decision Notice were then updated in 2013-2014 (Montana Fish, Wildlife, and Parks, 2013, 2014). Also in 2013, FWP released a report titled "Selected Results from Surveys of Resident Big Game Hunters and Private Landowners Regarding the Topic of Chronic Wasting Disease" (Lewis et al., 2013) in which the agency reported on hunter and landowner awareness of CWD and their preferences regarding CWD management.

Game Farms in Montana

Ballot Initiative 143, passed in 2000, prohibited the creation of any new game farms in Montana. Upon any new CWD detection in a game farm, the adjacent hunting districts would be defined as a high-priority surveillance zone.

Prevention

The following section details current policies that aim to prevent the introduction and spread of CWD in Montana.

Baiting and Feeding

Feeding of big game animals facilitates the transmission of disease by concentrating and aggregating animals. Baiting and feeding of big game animals is illegal in Montana under MCA 87-6-216, which states, "a person may not provide supplemental food attractants to game animals by purposely or knowingly providing supplemental feed attractants in a manner that results in an artificial concentration of game animals that may potentially contribute to the transmission of a disease or that constitutes a threat to public safety."

Scents and Lures – MCA 87-6-2xx (effective Jan 1, 2018) states that the use or sale of deer or elk urine to mask human odor is prohibited if the urine originated in a state or province with documented occurrences of chronic wasting disease as determined by the commission.

Carcass Transport

CWD prions in animal excreta or carcasses have been shown to remain infectious for at least two years in the environment (Miller et al., 2004). Due to the concern over indirect, environmental transmission, 41 states (including Montana) and seven Canadian provinces have restricted the import of hunter-harvested cervid parts (www.cwd-info.org). Montana law (MCA 87-6-4xx, effective Jan 1, 2018) prohibits the import of heads and spinal columns of cervids harvested in states or provinces that have CWD in wild or captive populations. A list of those states and provinces is posted on FWP's website and in the big game regulations and kept current by agency personnel. Importing processed meat, quarters, hides, antlers and/or clean skull caps, ivories, de-boned meat, and finished mounts is allowed.

Rehabilitation/Translocation

Currently, live animal tests for CWD are invasive, expensive, and less sensitive than post-mortem tests. Movement of live cervids within Montana or importing live cervids from outside Montana risks introducing or spreading CWD. As of 2005, FWP no longer rehabilitates orphaned elk calves and deer fawns (Montana Fish, Wildlife, and Parks, 2008). This policy eliminates the potential for the spread of CWD that could occur by mixing CWD infected and non-infected orphaned animals at the rehabilitation facility and later releasing those animals in the wild.

FWP has not moved wild cervids within the state since 1997 when elk from the Moiese Bison Range were transplanted to Region One. FWP's current policy restricts the import or movement within the state of wild cervids. Intrastate and interstate movement of game farm

animals is regulated by the Department of Livestock. Intrastate movement is currently restricted by the requirement for negative tuberculosis and brucellosis tests prior to movement. Import of captive cervids from other states requires not only negative tuberculosis and brucellosis tests for individual animals, but also assurance that the herd of origin has been under an active CWD surveillance plan for 5 years with no incidence of CWD.

Carcass Disposal

Environmental contamination through dispersal of heads and spinal columns from butcher waste has the potential to either introduce or spread CWD in wild populations. The U.S. Environmental Protection Agency (EPA), the State of Wisconsin, and the U.S. Department of Agriculture have identified appropriate carcass disposal methods to include burying waste in municipal solid waste landfills (MSWLFs), incineration, alkaline hydrolysis tissue digestion, or on-site burial. The EPA currently recommends using MSWLFs for the large-scale disposal of potentially CWD-contaminated carcasses and wastes.

As of March 2017, CWD has not been found in Montana's free-ranging cervids through FWP's ongoing surveillance program that has tested over 17,000 animals since 1996. Carcass parts from animals harvested in the state are therefore considered "low risk" for containing the prion that causes CWD and may be disposed of in MSWLFs as has occurred for decades. Should CWD be found in Montana, carcass waste of animals harvested from management areas where CWD has been detected could still be disposed in an approved (40CFR Part 258) MSWLFs. The Montana Department of Environmental Quality, Solid Waste Division, regulates and certifies MSWLFs and has provided a list of Class II sanitary landfills qualified to dispose of potentially CWD-contaminated materials. Carcasses and carcass wastes with CWD may also be incinerated when possible.

FWP will also continue educating the public, meat processors, taxidermists, and MSWLF operators to obtain cooperation in the proper disposal of carcasses and carcass parts.

MONTANA CWD RESPONSE PLAN

Herein are the actions Montana Fish, Wildlife and Parks (FWP) will take upon any first or new detection of CWD in the state. These efforts are designed to minimize spread among herds and maintain low prevalence in infected herds. This response plan is broken into two phases, each with several steps. Phase I is the initial response to CWD detection. Phase II is the long-term management of the area once prevalence and distribution of the disease is better known. While most attention is currently on mule deer since they appear to be the most susceptible cervid within our state (Miller et al., 2000), similar actions would be considered for a new detection in white-tailed deer, elk or moose.

Objectives for CWD management:

1. Minimize effects of CWD on ungulate populations
2. Maximize recreational opportunities
3. Minimize health risks of CWD for humans
4. Maintain public trust and support
5. Increase understanding of CWD impacts on cervid populations and human health
6. Use Adaptive Management to evaluate management effectiveness
7. Minimize cost

Once CWD is detected in the wild in Montana, FWP's goal will be to reduce prevalence to and/or maintain it at 5% or lower within the affected population. The geographical size of the area to be managed will depend on the results of sampling during initial response described below, but would most likely be at least at the hunting district or county scale. This goal takes into consideration that once discovered, CWD prevalence in the local cervid population may already exceed 10%. If this is the case, reducing prevalence to ≤5% may prove difficult or impossible.

Phase I: Initial Response to a First or New Detection

Response to a first or new detection of CWD will follow an Incident Command Structure. The FWP Regional Supervisor will be the Incident Commander heading up response efforts if he/she has had incident command training, otherwise it will be an appropriate FWP employee with training. He/she will work closely with the Regional Wildlife Manager, the Area Wildlife Biologist, the Regional Information Officer, the Wildlife Division Administrator and the Game Management Bureau Chief.

Step 1 – Begin public information campaign and identify Initial Response Area (IRA)
Immediately following verification of a first or new detection of CWD, FWP's Communication and Education division will begin an aggressive information campaign as described in the *Public Information Plan for Chronic Wasting Disease in Montana* (Appendix 1). The information campaign will identify the site of the detection, the actions FWP is going to take, and, most

importantly, the reasons such actions are necessary. Public understanding of the risks of CWD to our wildlife is critical in maintaining support for our management efforts.

Immediately following a first or new detection of CWD, FWP will define an approximately 10-mile buffer (~ 314 square miles) around the site of the first detection which will be referred to as the Initial Response Area (IRA). The IRA will be reasonably described using boundaries such as county roads, creeks, ridge tops, etc. to facilitate subsequent management actions. FWP will put up signs at major access points identifying the area as an IRA and that special hunting and other regulations apply. The Area Biologist and Regional Wildlife Manager will estimate the herd size, distribution, age and sex ratios, and density and will identify important movement corridors and connectivity with neighboring populations. This information may require a survey flight and may be used to modifying the original IRA boundary. If other positives are detected during the initial response that are more than five miles from the index case, FWP will evaluate and has the option of expanding the initial IRA based on regional FWP staff input.

With definition of the IRA, FWP will also define a CWD Transport Restriction Zone. This zone will be one or more contiguous counties, or portions of counties, that contains the IRA. Transportation of cervid carcasses or parts, as defined below, from the IRA will not be allowed outside of this zone. We have defined a CWD Transport Restriction Zone that is larger than the IRA so that it provides access to meat processors and taxidermists for hunters participating in a Special CWD Hunt (See below).

<u>Step 2 – Determine CWD prevalence and distribution within the Initial Response Area (IRA)</u>
As soon as possible after initial detection, FWP will move to collect samples to determine CWD prevalence and distribution within the IRA. Prevalence will be assessed primarily using samples from hunter-harvested animals, most likely through a Special CWD Hunt (see below), using a random sampling design rather than weighted sampling as described in the surveillance plan used pre-detection. FWP's disease ecologist will determine the necessary sample size to detect CWD within the IRA at 1% prevalence with 95% confidence. This could be approximately 300-500 samples. These sample size goals will likely be applied to one target species, although all other cervid species within the IRA will be sampled opportunistically. FWP will continue to collect samples from symptomatic and road-killed animals to inform the distribution of CWD within the IRA, but for statistical sampling reasons that call for an unbiased sample, these will not contribute to our estimates of prevalence.

Sampling to measure prevalence and distribution will be achieved using public hunting when possible, but may also include special permits to landowners who must then donate the meat to a food bank, agency lethal removal, or other means if necessary. If the first detection occurs when a hunting season could be authorized (August 15 – February 15) a public hunting effort will be mounted. If the first detection is during spring or summer, a public hunting effort will be mounted as soon thereafter as possible with consideration given to animal seasonal movements and concentrations, but may begin as early as August 15.

FWP staff will track the harvest through mandatory checks of harvested animals and FWP's Wildlife Disease Ecologist (currently Dr. Emily Almberg) and/or Wildlife Veterinarian (currently Dr. Jennifer Ramsey) will determine when sufficient animals of the needed sex and age classes have been taken to satisfy sampling requirements. This sampling effort may in and of itself constitute a density reduction at the herd level.

Establishing a Special CWD Hunt in the Initial Response Area (IRA)

Any special hunt within the IRA will require special rules and regulations that will likely differ significantly from the regular hunting season regulations, even if the hunt occurs during the regular season. The following are some of the special regulations, rules and reporting requirements that participants will have to follow. There may be additional special regulations warranted by circumstances of a particular hunt.

- The IRA boundaries and special regulations for hunt participation will be made widely known by FWP's Communication and Education Division through press releases, social media, the FWP website, radio, TV, and other venues. This will include a definition of the IRA, the Transport Restriction Zone, rules and regulations outlined here, and dates of the special hunt.
- Licenses – Existing A and B licenses will continue to be valid in the hunting district(s), including the IRA, during the general archery and firearms seasons, but hunters using those licenses in the IRA will be subject to all the special rules and regulations of the Special CWD Hunt. Additionally, hunters may purchase CWD Special Hunt B Licenses valid only within the IRA during the archery, firearms and any special extended CWD hunt. A hunter may not possess more than seven deer B licenses per year. There may be two different types of Special Hunt B licenses offered: either-sex licenses and antlerless-only licenses based on sampling need. A limited number of licenses of each type will be offered depending on sampling need, but likely about 1,000 total licenses. Only in this or another special hunt circumstance can a hunter in Montana harvest more than one buck per year. In the case of a CWD special hunt he/she could take one buck with a regular A license harvested either elsewhere or within the IRA during the general archery and firearms seasons, and another harvested only within the IRA with a CWD Special Hunt Either-sex License during the special CWD hunt. Other CWD Special Hunt B Licenses will be for antlerless-only. Setting up and sale of CWD Special Hunt Licenses will be coordinated with FWP licensing bureau.
- The CWD Special Hunt will be open to any legal weapon. This means that hunters might be using rifles during what would otherwise be an archery-only season.
- All animals harvested during the CWD Special Hunt must be checked at a FWP CWD Special Hunt Check Station within two days. FWP will establish at least two check stations at access points to the IRA to collect samples and aid hunters. Check stations will be open from 10:00 AM to 1 hour after sunset as determined from sunrise/sunset tables in FWP hunting regulations. These check stations will be operated only as part of the CWD management action and in addition to FWP staff may be staffed by volunteers or people from partner agencies. Hunters will be required to document the exact location of the kill

using a GPS or USGS Topographic Map. Hunters who quarter or bone out their animal must bring in the head and meat to the check station.

- Submission of a sample for CWD testing will be mandatory for all cervids harvested in the IRA during a Special CWD Hunt regardless of type of license used. Species, sex, and age of the animal will be recorded and retropharyngeal lymph nodes, a tooth for aging, and a genetic sample will be collected.
- Whole carcasses of cervids harvested within the IRA will not be allowed out of the Transport Restriction Zone. All cervids taken within the IRA will be tagged at a FWP Special CWD Hunt Check Station with a tag reading "MTFWP CWD TEST" (note: exact wording not determined) and a unique identification number. Tags will be in identical pairs: one for the carcass and one for the head or sample. Heads of animals will be surrendered at the check station, although special accommodations will be made for heads destined for taxidermy. The carcass tag will identify the animal as having been checked by FWP and serve as evidence of sex. The spinal column may be left in the field at the kill site. Carcass parts that may be removed from the Transport Restriction Zone include:
    - meat that is cut and wrapped or meat that is boned out
    - quarters or other portions of meat with no part of the spinal column or head attached
    - hides with no heads attached
    - skull plates or antlers with no meat or tissue attached
    - skulls that have been boiled and cleaned to remove flesh and tissue
- Any area where an IRA is established is likely to include private land. A Special CWD Hunt does not grant hunter access to any private land. Hunters must get landowner permission to hunt on private land.
- If enough samples are not collected by February 15, FWP may consider other options including, but not limited to:
    - Continuing the Special CWD Hunt after February 15. This will require special Fish and Wildlife Commission action.
    - Special kill permits to landowners who must then donate the meat to a food bank.
    - Agency lethal sampling.
- The Special CWD Hunt will end when enough animals have been sampled to detect CWD at 1% prevalence with 95% confidence as determined by FWP's disease ecologist or wildlife veterinarian.
- FWP's Communication and Education Division will let the public know about the end of the hunt through press releases, social media, the FWP website, radio, TV, and other venues.

The assumption is that most hunters will want to know the test results prior to consuming the meat. Every effort will be made to return test results from within the IRA to hunters in a timely manner. However, because test results may not be known for a week or more hunters will likely have to process their meat before they have a test result in hand.

Success of the hunt will in many cases be largely determined by private landowners' participation. Therefore, it is again vitally important the messages to the public and to individual landowners stress the threat of CWD, the importance of immediate action, and the steps in this action plan.

Potential complications

As with any response of this nature, unpredicted circumstances are likely to arise. While this plan attempts to prepare for many of those, some could result in a level of situational complexity that will require widespread attention by department staff.

For instance, if in our efforts to determine prevalence, the IRA expands dramatically by finding more positives, say from approximately 314 square miles (one positive = 10-mile radius IRA) to 3,000 square miles (10 positives depending on where they're found) the logistical complexity of our response will increase dramatically. This plan allows for that increased complexity by providing clear direction on requirements for establishing disease prevalence and guidelines for trying to contain the disease within the IRA. Additionally, though we understand that more complex scenarios will increase involvement with the public, stakeholders and the media, our communication plan can expand appropriately. However, FWP recognizes that with complexity comes more requirements on staff, and cooperation from FWP employees from across the state will be vital.

Step 3 – Evaluate results of surveillance efforts from Phase I

The first sampling efforts through the Special CWD Hunt will inform us about the prevalence and distribution of CWD within the Initial Response Area. Prevalence will be reported for all cervids by sex and age class. Depending on what is learned we may have to increase the geographic size of the Initial Response Area and continue with Initial Response Phase I efforts. If other positives are detected more than five miles from the index case, FWP will evaluate and has the option of expanding the initial IRA based on regional FWP staff input. Depending on what is known about animal habitat use and movements, it may be desirable to radio-collar animals (~30) to better determine seasonal movements and distribution. Long-term tracking of these animals may help to estimate transmission rates. If satisfied with Initial Response results, we move onto Phase II.

Phase II: Long-term Management Plan

Decisions regarding long-term management will depend on the prevalence and distribution of CWD determined in Phase I. If prevalence is >5% a program designed to reduce density and/or age structure may be necessary. If prevalence is ≤5% there may be no need for changing management. Regardless of prevalence determined in Phase I, a monitoring strategy will be developed to detect the spread of CWD and to track CWD prevalence over time in infected areas. This may entail annual or periodic surveillance, depending on available resources, surveillance needs elsewhere in the state, and objectives related to assessing management success. As in the initial response effort, prevalence will be tracked largely using samples collected from hunter-harvested animals. Road-kills and symptomatic animals will also

contribute to the monitoring of the distribution of the disease. Sample collection may entail the use of "head barrels" for hunters to deposit heads of animals taken, increased sampling at area game check stations, or other means as determined necessary by the CWD Action Team.

A "one size fits all" approach to CWD management will not work given the diversity of habitats where cervids exist. FWP personnel and local stakeholder or constituent groups will develop herd or population plans tailored more specifically to circumstances of particular populations or areas at a hunting district or larger scale. These herd plans would be delivered to the FWP Commission for final decision. Areas of the state may be identified based on their known infection status or estimated risk of infection and these identifiers may be used to determine appropriate management actions to meet stated objectives. The goals of the management program should be compatible with management strategies in adjoining areas. Management actions may consist of one or more of the following alternatives, or may be unique alternatives that have not been included in this list:

- Increased harvest, especially antlered animals. This could manifest as expanded opportunity for all age/sex classes.
- Hot spot culling/targeted removal in limited areas around CWD detections.
- Transport restrictions. FWP would work with processors and taxidermists to help enforce.
- Reducing cervid aggregations within the management zone by removing or fencing highly localized attractants, hazing, dispersal hunts or by other means.

Evaluation of program efficacy

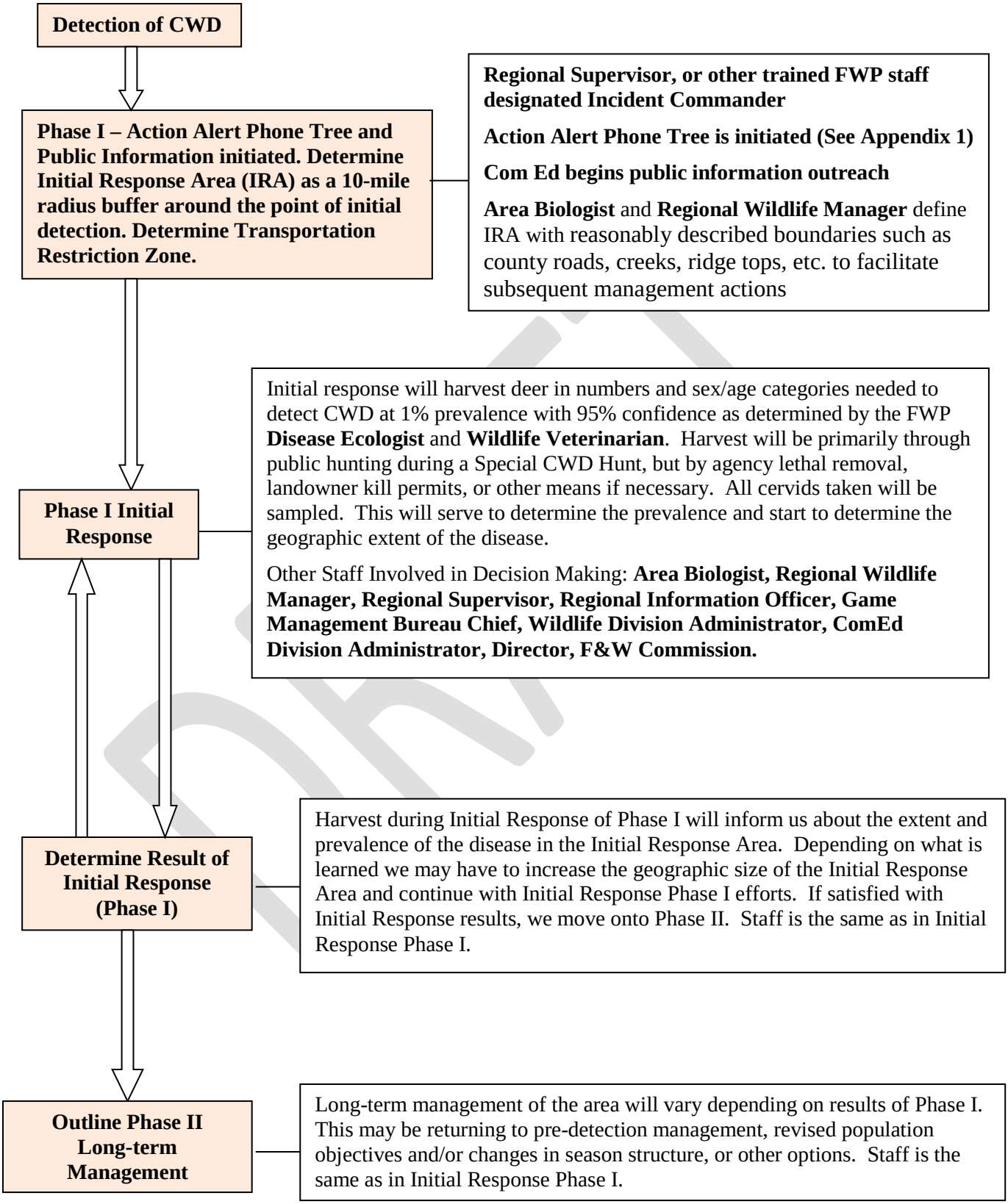
Once a CWD management plan has been developed and approved for a specific herd or population, a monitoring program at five and ten years post-detection will be developed to assess management efficacy. Depending on existing CWD prevalence and management goals, this may entail securing additional funding for more intensive surveillance or research.

Communication and Educational Outreach

The *Public Information Plan for Chronic Wasting Disease in Montana* (Appendix 1) is intended to guide Montana Fish, Wildlife, and Parks' communication efforts prior to and after the detection of CWD in Montana. It includes key messages to various audiences, including the general public, hunters, stake holders and other state agencies; communication techniques that will be used; timing of strategies; overall communication objectives, and personnel responsible for executing each piece of the plan.

We must inform the public about the seriousness of CWD prior to discovery and get appropriate buy-in on proposed agency action. We must also plan for the effective communication of Montana Fish, Wildlife, and Parks' response once CWD is detected. An efficient response will depend greatly on our efforts at communication with key audiences.

CWD Response Flow Chart



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APPENDIX 1

Montana CWD Public Information Plan

Chronic Wasting Disease has yet to be discovered in wild cervid populations in Montana. However, testing and monitoring for CWD continues in Montana. Through the end of the 2016 big game season FWP had tested over 17,000 deer, elk and moose harvest. None tested positive.

However, all states and provinces around Montana, except Idaho, are positive for CWD, including a Wyoming mule deer only eight miles from our border. With the disease so near us, it's quite possible CWD is already here, but undetected.

This public information plan is intended to guide FWP's communication efforts prior to and after the detection of CWD in Montana. It includes key messages various audiences, including the general public, hunters, stake holders and other state agencies; communication techniques that will be used; timing of strategies; overall communication objectives, and personnel responsible for executing each piece of the plan.

Communication Problem

Montanans and those interested in big game hunting here have yet to really understand the impact CWD poses to the state's wild ungulate populations. Unmanaged, CWD could cause populations declines of up to 40 percent or more, as has been seen in other states.

A positive test will generate enormous interest, from national and statewide media, from citizens concerned about public health risks, from hunters and conservation groups concerned about impacts to wildlife populations and hunting opportunities, and from interest groups affected by specific management actions.

We must inform the public about the seriousness of CWD prior to discovery and get appropriate buy-in on proposed agency action. We must also plan for the effective communication of FWP response once CWD is detected. An efficient response will depend greatly on our efforts at communication with key audiences.

This public information plan will look at two specific areas of focus: pre-detection communication and post-detection response communication. The communication problem for each will be different:

- Pre-detection: The communication objective for this phase of the plan is increasing awareness about CWD and FWP's response plan, while generating support for the plan as well as prevention and monitoring activities.
- Post- detection response: The communication objective in this phase is generating awareness and understanding of response, getting buy-in/support from specific groups needed for an effective response (hunters, landowners, businesses, local officials), communicating the logistics of the response and generating/maintaining support from stakeholders/public.

Communication Challenges

These communication objectives present a variety of challenges, including:

- High volume of information requests, from media and citizens, of department personnel, license agents, Hunter Education instructors, meat processors and taxidermists, guides and outfitters, land-management agencies.
- Reduction in license sales.
- Administrative redirection of staff priorities.
- Criticism that FWP did not do enough to prevent infection and/or will not do enough to contain infection.
- Criticism that FWP is being too aggressive in its reaction to CWD.
- Scrutiny and criticism from the public regarding specific management actions, possible legal action (judicial injunction, etc.) to halt action.
- Geographical shift in hunting pressure away from infected area, with impacts on local economies, license sales, Block Management cooperators.
- Increased demand for either free or expedited testing, both statewide and in the affected region.
- Controversy or confusion over the various testing methods concerning their specificity, sensitivity, and their intended purpose (i.e. not as a meat inspection test).
- Increased incidence of waste of game violations.
- Requirements for increased enforcement activity in an affected area.
- Possible accusations that human illness or death is attributable to CWD and, by extension, the department.
- Possible accusations that CWD is FWP's fault.
- Loss of business for meat processors and taxidermists.
- Landowner distrust of agency, could close off sects of land to hunting, serving as possible refuge for disease.
- Concern over appropriate disposal of deer and elk carcasses or carcass parts.
- Concern over the movement of harvested carcasses and carcass parts out of Montana or into Montana from other states.
- Concern over potential spread to or from alternative livestock facilities.

Communication Objective

This public information plan should accomplish the following:

- Increase awareness of CWD and current prevention strategies amongst targeted audiences.
- Provide clear understanding of surveillance program, goals and accomplishments.
- Increase awareness and understanding of FWP's CWD response plan.
- Increase support for CWD response plan amongst targeted audiences.

- Generate support for response activities so response goals can be more easily met.

Audience

- FWP Commission
- FWP staff
- State agencies – Dept. of Livestock, State Epidemiologist, State Veterinarian, Dept. of Health, DNRC, Board of Outfitters, Tourism
- Federal agencies – U.S. Geological Survey, U.S. Fish & Wildlife Service, BLM, National Park Service, Forest Service, USDA/APHIS
- Tribal governments
- Local jurisdictions – county commissions, county health departments, conservation districts, grazing associations
- Wildlife agencies in neighboring jurisdictions
- Stockgrowers, alternative livestock associations and landowner organizations
- Media – local, statewide newspapers, radio, TV, websites, national magazines, western media (CO, WY, ID, ND, SD, Alberta, Saskatchewan, etc.)
- Legislators
- License agents
- Montana and non-resident hunters
- Commercial meat processors/taxidermists
- Outfitters/MOGA
- Statewide conservation groups and local sportsmen's clubs
- Hunter Ed and Bowhunter Ed instructors
- Universities
- Landfills, waste facilities

Messages

All communication should consider these speaking points when appropriate and necessary:

Pre-detection

- FWP has been monitoring wild cervid populations for nearly 20 years in hopes of discovering CWD early when it gets to Montana.
- FWP staff and leaders have worked hard to prepare for the eventual discovery of CWD in wild Montana cervids. Our response plan reflects these efforts and is our best way to keep CWD at acceptable levels in the immediate cervid population.
- There is no known cure for CWD.

- If left unmanaged:
    - CWD could have long-term dramatic impacts to cervid population numbers locally, and potentially statewide, if left unmanaged.
    - If left unmanaged the prevalence of CWD will increase in cervid populations. High prevalence leads to population declines.
    - Unmanaged, CWD will lead to the decrease in wildlife related recreational opportunities, like hunting and viewing.
    - It could spread to other areas and/or other species.
    - Broader negative repercussions could include economic, hunting legacy, predator management, plant community management and hunting interest.
- When CWD is detected, initial management actions will involve some level of herd reduction, all dependent on specific circumstances.
- FWP's initial response to a CWD detection will be to sample cervids, primarily mule deer, with the goal of determining disease prevalence and distribution.
- FWP's CWD sampling will be done with public hunters through a special hunt. However, if enough samples aren't obtained with hunters, the agency will look to other options including: landowner tags and agency removal.
- FWP will use science to guide decision making process when determining specific management decisions, but other factors will also be considered. These will include: landowner cooperation, social acceptance of management decisions, access to animals in need of harvest, hunter willingness to participate and financial impacts.
- Hunters should never eat meat from an animal that appears sick. Even in a healthy animal the brain, spinal column or lymphatic tissues should not be consumed.
- CWD has never been proven to pass from an infected animal to a human. However, the Centers for Disease Control and the World Health Organization advise against consuming meat from CWD positive animals. Meat from CWD positive animals should be disposed of properly without being in violation of Montana's wanton waste statutes.
- In executing our management actions, FWP will work with local law enforcement, governments, landowners and land management agencies.

Post-detection

- FWP is mobilizing an Incident Command Team to deal with the discovery of CWD. This team will work closely with local communities, the public and other state and federal agencies.
- An Initial Response Area (IRA) has been established and encompasses a roughly 10-mile radius around where the detected animal was found/killed.
- Specific details to include during response to initial positive test:
    - Specific species, age, sex, geographic area, date and prior level of testing in the area that the infected animal was harvested
    - Herd population numbers and susceptible species in the area.

    - Specific management actions recommended in FWP's Management Plan, with rationale for action stressing need to determine the prevalence of disease before management plans are implemented.
    - Accompanying the above, a statement that management actions aren't guaranteed to "eradicate" the disease, but that inaction is not a valid alternative.
- Announcement of public meeting in affected area and in all FWP administrative regions to discuss incident and department responses.
- FWP has created a web site devoted to CWD issues in general and this incident in particular.
- FWP tested for the disease, with specific attention to "high-risk areas" and is not surprised at its arrival. Include maps showing distribution of samples collected since 1998.
- Nationwide distribution of CWD and an overview of management responses and outcomes in other states.
- Review of risk of transmission to humans; consumption advisories ("Hunters should never eat meat from an animal that appears sick, and even in a healthy animal, the nervous and lymphatic tissues should not be consumed."). Refer to language detailed in FWP's Chronic Wasting Disease pamphlet.
- Assurance that FWP has contacted the hunter who submitted the positive sample and has waived requirement that meat be consumed. Also assurance that landowners within a 20-mile radius of where animal was harvested have also been contacted.
- Assurance that FWP is contacting landowners and land-management agencies in affected area, specifically asking trespass permission, where appropriate, in order to conduct management activities.
- Requirement that hunters in the IRA in subsequent seasons will need to submit heads of deer and elk for testing. Results of tests will be expedited and made available to the participating hunters.
- Requirements for disposal of carcass wastes and/or contaminated carcasses, especially from IRA.
- Details on contacting FWP and Health and Human Services (county health departments, regional and statewide phone numbers), plus respected sources of CWD information (web sites, etc.), including Centers for Disease Control, World Health Organization, CWD Alliance, etc.
- Q&A format addressing basic questions of disease and its implications.

Communication Methods, Responsibilities and Timing

Method (Pre-Detection)	Responsible	Timing
News releases on CWD monitoring effort or other newsworthy items (advisory panel meeting, testing efforts, new developments, etc)	CommEd/Regional info officers	When necessary
FAQs on CWD to include monitoring efforts and information about response plan	Information Bureau Chief (Lemon)	ASAP
Montana Outdoors article on CWD planning and monitoring efforts	Montana Outdoors Editor (Dickson)	ASAP
Social media posts about CWD – specifically tied to events (salvage permits, monitoring events).	Information Bureau Chief (Lemon)	
Public Service Announcements with key CWD messages (hunters look for symptomatic animals, salvage permits, etc.)	Information Bureau Chief (Lemon)	
Method (Post-detection)	**Responsible**	**Timing**
Initiate phone tree	Response team	24 hours from confirm
Develop FAQs on detection and initial response	Information Bureau Chief (Lemon)	24 hours from confirm
Issue news release statewide upon detection confirmation. Attach FAQs.*	Information Bureau Chief (Lemon)	24 hours from confirm
Establish CWD information page online with latest information, release and FAQs. Direct public and media to this page.	CommEd Division	24 hours from confirm
Convene news conference at HQ with FWP director, Wildlife Chief, CommEd chief, Incident Commander	Information Bureau Chief (Lemon)	48 hours from confirm
Speaking points to regional information officers	Information Bureau Chief (Lemon)	48 hours from confirm

*****All news releases will be done in conjunction with website and social media posts.

EXAMPLE FAQs and PRESS RELEASE

Pre-detection FAQ example

Q. What is Chronic Wasting Disease and how do deer, elk and moose catch it?

A. CWD is one type of a class of diseases called Transmissible Spongiform Encephalopathies, or TSEs. These diseases are caused by infectious, mis-folded prion proteins, which cause normal prion proteins throughout a healthy animal's body to mis-fold, which results in organ damage and eventual death. These prions are found throughout bodily tissues and secretions and are shed into the environment before and after death. When other animals come in contact with the prions, either from infected live animals or from contaminated environments, they can be infected. The disease is slow acting, degenerative and fatal. The name comes from the appearance of symptomatic animals, which get very skinny and sick looking before they die.

Q. Can humans be infected by CWD?

A. There is no known transmission of CWD to humans. However, the World Health Organization and the Centers for Disease Control recommend not consuming meat from an animal known to be infected with CWD. Some simple precautions should be taken when field dressing deer in the Initial Response Area (IRA):

- Wear rubber gloves when field dressing your deer.
- Minimize the handling of brain and spinal tissues.
- Wash hands and instruments thoroughly after field dressing is completed.
- Avoid consuming brain, spinal cord, eyes, spleen, tonsils and lymph nodes of harvested animals. (Normal field dressing coupled with boning out of a carcass will essentially remove all of these parts.)

Q. Where does CWD come from?

A. The origin of CWD is unknown. It was discovered in 1967 in mule deer at a research facility in Colorado. Shortly thereafter it was also found in captive mule deer and elk in Ontario, Colorado, and Wyoming. In the 1990s it popped up in wild white-tailed and mule deer, elk, and moose in Colorado and Wyoming and captive animals in Saskatchewan and South Dakota. By the early 2000s, CWD was found in the wild in Saskatchewan and Alberta and Illinois and Wisconsin.

CWD has continued to spread. As of 2017 it is in captive or free-ranging herds in 24 states, three Canadian provinces, Norway and South Korea. While it has not been found here yet, it will likely spread to Montana from infected wild animals in neighboring states or provinces.

Q. Why do you have to kill deer to get samples?

A. There are no non-invasive CWD tests for live animals. For research purposes, rectal or tonsil biopsies from live animals will work, but these tests are less sensitive and require capture, anesthesia, and minor surgery, making them impractical for widespread surveillance. The standard test is to look at an animal's retropharyngeal lymph nodes or brainstem for evidence of CWD. These samples can only be collected from dead animals.

Q. Can CWD be eradicated?

A. After decades of CWD management across the country, most agencies and researchers agree that CWD cannot be eradicated once it infects a herd. Eradication is not the goal of FWP. Other states have attempted eradication and set up unreasonable expectations with hunters and the public. Once it is found here FWP's goal is to limit the prevalence and spread of CWD.

Q. How will CWD impact deer and elk herds?

A. The short answer is we don't know yet. If CWD infects enough animals it will probably reduce the herd in the long term. Other states have seen deer populations decline when CWD infects 20 to 40 percent of a herd. In Wyoming, heavily-infected herds of mule deer declined 21 percent *per year* and whitetails 10 percent. Colorado saw a 45% decline in infected mule deer herds over 20 years. Clearly, if left unchecked CWD could result in large-scale population declines.

Because the distribution and intensity of CWD infections are variable across a broad landscape, the impacts across the same landscape will also be variable. Keeping deer numbers down and dispersed can keep the prevalence low and manageable. FWP's focus will be on managing CWD infected areas for prevalence at 5 percent or lower and preventing spread. This may also mean keeping deer or elk numbers low.

<u>Post- detection FAQ Example</u>

Q. Where has CWD been found?

A. CWD was found in a mule deer buck shot in Township xx, Section x, in XX county.

Q. What is FWP going to do?

A. FWP will establish an Initial Response Area and conduct a Special CWD Hunt to find out more about the prevalence and extent of CWD. Long-term management of the hunting district will depend on what is learned about the prevalence and extent of the disease during the Special CWD Hunt.

Q. What is an Initial Response Area?

A. The Initial Response Area (IRA) will include a roughly 10-mile radius around where the first CWD infected deer was killed. This area includes both private and public lands. It will be the focus area for Special CWD Hunt.

Q. What is a Special CWD Hunt?

A. A Special CWD Hunt is a hunt designed to sample enough harvested animals to determine prevalence and extent of the disease. It will occur only within the Initial Response Area and special rules and regulations will apply. Additional Special CWD Hunt B Licenses will be available to get enough harvest. All animals taken during a special hunt must be brought to FWP Special CWD Hunt check stations for sampling and to be tagged with a tag reading "MTFWP CWD Test" and a unique identification number. To prevent spread of the disease,

brain and spinal column material of animals taken during a Special CWD Hunt will not be allowed to be taken out of the county or counties that contain the IRA, an area defined as the Transportation Restriction Zone. The Special CWD Hunt will end when enough deer are sampled to determine prevalence and extent of the disease, which is estimated to be about 300.

Q. What is the Transportation Restriction Zone?

A. The TRZ is one or more counties, or portions of counties, that contain the IRA. To prevent the spread of CWD no brain or spinal column material from animals taken in the IRA are allowed outside the TRZ. We've identified the TRZ with consideration to game processors and landfills so that hunters have the option for processing and disposing of animals taken in the IRA. The spinal column may be left in the field at the kill site. Carcass parts that may be taken out of the Transport Restriction Zone include:

- o meat that is cut and wrapped or meat that is boned out;
- o quarters or other portions of meat with no part of the spinal column or head attached;
- o hides with no heads attached;
- o skull plates or antlers with no meat or tissue attached;

Q. Where can I get licenses for the Special CWD Hunt?

A. Licenses will be available at FWP Helena and Region headquarters. In addition to regular deer A and B licenses valid in the hunting district, additional either-sex and antlerless-only Special CWD Hunt B Licenses only valid within the IRA will be available over-the-counter first-come-first-served. Hunters are limited to one either-sex Special B License and up to six antlerless-only Special B Licenses, depending on the number and type of other licenses they already have. Individual hunters may take a maximum of seven deer per year in Montana, including any taken within the IRA. Only in this or another special hunt circumstance can a hunter in Montana harvest more than one buck per year. Setting up and sale of CWD Special Hunt Licenses will be coordinated with FWP licensing bureau.

Q. Do I have to get my deer tested from a Special CWD Hunt?

A. YES! All animals harvested during the CWD Special Hunt must be checked at a FWP Special CWD Hunt Check Station within two days. FWP will establish at least two check stations at access points to the IRA to collect samples and aid hunters. Check stations will be open from 10:00 AM to 1 hour after sunset as determined from sunrise/sunset tables in FWP hunting regulations. These check stations will be operated only as part of the CWD management action and may be staffed by volunteers or people from partner agencies. Hunters will be required to document the exact location of the kill using a GPS or USGS Topographic Map. Sex and age of the animal will be recorded and retropharyngeal lymph nodes, a tooth for aging and a genetic sample will be collected. Hunters who quarter or bone out their animal must bring the head and meat to the check station.

Q. How long will it take for me to find out if my deer has CWD?

A. Results from CWD testing of animals out of the IRA will be expedited, but it still may take up to three weeks. We recommend waiting to hear about results before consuming meat from the deer killed in the IRA. If your harvested deer is found to be positive, you can dispose of the meat appropriately at a landfill.

Q. Will FWP secure access to private land for hunters during the special CWD hunt?

A. No. The IRA is likely to include private land, but hunters are still required to secure access to hunt on private land.

News Release Example:

CWD found in southeast Montana

A 4-year-old mule deer buck shot 20 miles west of Broadus in October tested positive for Chronic Wasting Disease. This is the first wild animal to test positive for CWD in Montana.

CWD is a transmissible fatal brain disease that only affects deer, elk, moose and caribou. If left unmanaged, it can have long-term negative impacts on herd size and health.

Montana Fish, Wildlife and Parks is mobilizing an Incident Command Team to respond. "We've been preparing for this for almost two decades. That care and preparation will pay off with an effective and well considered response," said FWP director Martha Williams.

FWP has established an Initial Response Area, or IRA, in Hunting District 704 that includes all land within a 10-mile radius around where the CWD-positive deer was killed.

A Special CWD Hunt will occur only within the IRA beginning December 1. The goal of the hunt is to sample about 300 harvested deer to determine prevalence and extent of the disease. There are additional rules and regulations for the Special CWD Hunt that apply only within the IRA. Special CWD Hunt Rules, Regulations and Maps are available online at: www.fwp.mt.gov/cwd, at any FWP Region office, and at two Special CWD Hunt Check stations. Check stations are located at the junction of US Hwy 212 and State Hwy 59 three miles northwest of Broadus, and at the junction of US Hwy 212 and the Pumpkin Creek Road 22 miles west of Broadus. The Special CWD Hunt will end when enough deer are sampled to determine prevalence and extent of the disease, which is estimated to be about 300, but no later than February 15.

In addition to regular deer A and B licenses valid in HD 704, 300 either-sex and 700 antlerless-only Special CWD Hunt mule deer B Licenses only valid within the IRA will be available over-the-counter first-come-first-served. Hunters are limited to one either-sex Special B License and up to six antlerless-only Special B Licenses, depending on the number and type of other licenses they already have. Individual hunters may take a maximum of seven deer per year in Montana, including any taken within the IRA.

All deer harvested within the IRA must be checked at one of the two FWP Special CWD Hunt Check Stations set up for the hunt. Every deer harvested within the IRA must be sampled for

CWD. This involves simply allowing biologist to take samples of the deer's retropharyngeal lymph nodes. Test results will be available within three weeks.

Brain and spinal column material of deer taken during the hunt will not be allowed to be transported outside of Powder River County. The spinal column may be left in the field at the kill site. Carcass parts that may be removed from Powder River County include:

- meat that is cut and wrapped or meat that is boned out
- quarters or other portions of meat with no part of the spinal column or head attached
- hides with no heads attached
- skull plates or antlers with no meat or tissue attached
- skulls that have been boiled and cleaned to remove flesh and tissue

CWD is not known to infect humans. However, the World Health Organization recommends not consuming meat from CWD positive animals. Some simple precautions should be taken when field dressing deer in the IRA:

- Wear rubber gloves when field dressing your deer.
- Minimize the handling of brain and spinal tissues.
- Wash hands and instruments thoroughly after field dressing is completed.
- Avoid consuming brain, spinal cord, eyes, spleen, tonsils and lymph nodes of harvested animals. (Normal field dressing coupled with boning out of a carcass will essentially remove all of these parts.)

FWP has set up a special website for CWD information. This will include any public notices, hunt information and maps – www.fwp.mt.gov/cwd.

A public meeting is scheduled for Tuesday night at 7 p.m. at the Broadus High School gym. FWP Incident Command and other staff will be there to answer questions.

APPENDIX 2
Estimated Staffing and Budget for Action Plan Upon Detection of CWD

Item	Cost per unit	Est number of units	Total cost per item	Add 2% wiggle room
Supplies	NA	NA	4500	$4,590
Shipping	25	56	1400	$1,428
Testing Costs	17 for ELISA, 35 for IHC	500	12000	$12,240
Travel (mileage, gas, hotel stays)	NA		19000	$19,380
Personnel (6 Conservation Tech 4, each hired for 26 weeks @ $27.9374/hr)	27.9374	6240	174329	$177,816
Personnel (1 Conservation Tech 5, hired for 52 weeks @ $30.2324/hr)	30.2324	2080	62883	$64,141
Per diem ($23/day)	23	298	6854	$6,991
Housing	2000/mos to accommodate 6 people	6 months	12000	$12,240
Phone & mobile internet for techs	$65/mos	6 techs for 26 weeks; 1 tech for 52 weeks	3120	$3,182
Print costs (flyers, brochures)	NA	NA	5000	$5,100
Signage (large signs, boundary signs, maps, labor and travel for installation)	NA	NA	10000	$10,200
Advertisement (print, radio, and TV)			20000	$20,400
Dump costs	1 cent per pound	30000	300	$306
Survey flights following first detection	150/hr	24	3600	$3,672
GPS collars for mule deer within and around the IRA	1060	30	28500	$29,070
GPS collar activation fee	40	30	1200	$1,224
Helicopter capture of 30 mule deer within and around the IRA	725	30	21750	$22,185
Capture supplies/drugs	NA	NA	2500	$2,550
Personnel – Capture associated	NA	NA	4000	$4,080

travel costs				
Spotter plane/relocation flights			2000	$2,040
Collar air time (x 4yrs)	$55/collar/6 months	30 collars for 4 years	13200	$13,464
TOTAL			**408137**	**$416,300**